



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

646.3811

Job Sheet 168251



Part No: 646.3811

Job Qty: 10 ea

Part Name: Radius Block



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 11/13/17

Job Tracking No:

Due Date: 11/28/17

Created By: Linda Lacelle

Type: Stock

Description:

Note: DWG REV N/C IPP REV:A NEW ISSUE 12-10-22 JLM VERIFIED:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
90	Start up Operation	10 Ea	11/27/17	11/27/17	0.00	0.00	Start Up Container		J.C.-L. 18-01-02
110	CNC Vertical Machining	10 pcs	11/28/17	11/28/17	0.00	3.91	HAAS 1		J.C.-L. 18-01-02
120	QC	10 pcs	11/28/17	11/28/17	0.00	0.00	QC2		J.C.-L. 18-01-02
130	QC	10 pcs	11/28/17	11/28/17	0.00	0.00	QC8		J.C.-L. 18-01-02
140	Outsource	10 pcs	11/28/17	11/28/17	0.00	0.00	Outsource4		JAN 23 2018
150	Packaging	10 pcs	11/28/17	11/28/17	0.00	0.00	Packaging2		JAN 23 2018
155	QC	10 pcs	11/28/17	11/28/17	0.00	0.00	QC5		38 JAN 24 2018
180	Packaging	10 pcs	11/28/17	11/28/17	0.00	0.00	Packaging3	CCK105	AT 18-01-24
190	QC21-SA	10 Ea	11/28/17	11/28/17	0.00	0.00	QC21		

Part Op 110 - 1-Machine per DWG

Descriptions: 140 - Issue P/O to ATG : _____

180 - ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***

Job Allocations

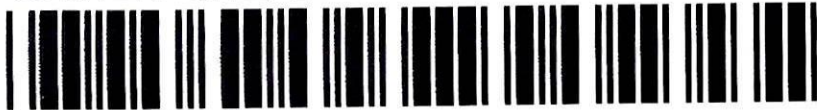
Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	M7075T6B1.000X00.250	1	5	0	0

Part Specifications

Specifications could not be found.

Plex 11/14/17 7:16 AM dart.boucher.sylvie

DART
AEROSPACE
S027821



Radius Block

PART NO: 646.3811

Revision:

Operation: Start up Operation

Change No:

Mfg Date: 01/02/18

Job No: 168251

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

WCE / UPDATE

Work Order update only ☐

DART
AEROSPACE

AGAINST DEPARTMENT/PROCESS

Tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐
Wing ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐
Wing ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Fab ☐	Composite ☐	Supplier ☐	

Effective :

MRB (QSI042) Approval

Disposition

Completed By

Lead hand / Supervisor
Approval Verification

DART
AEROSPACE
S027821



Radius Block

PART NO: 646.3811
Original Serial #: S027821
Revision:
Operation: Outsource
Change No:

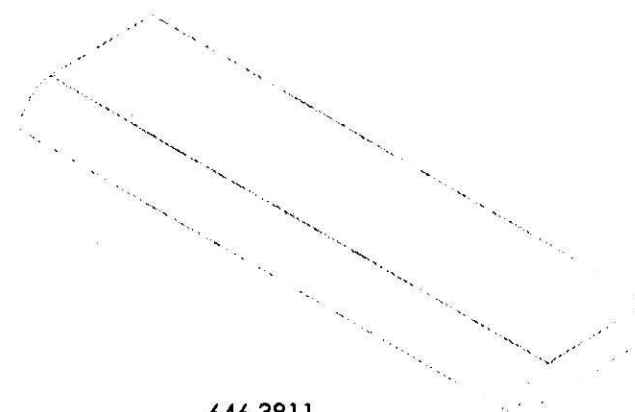
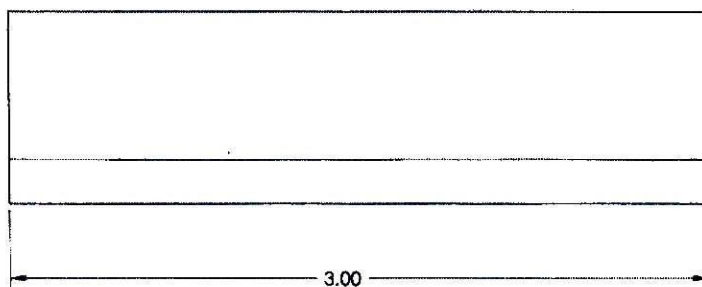
Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Root Cause

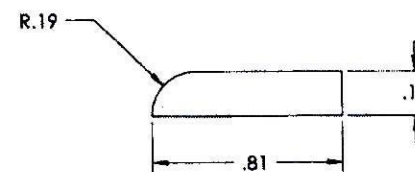
Environment ☐	No Re-verification ☐	Pressure/Forced ☐
Design ☐	Operator ☐	Bending ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/W ☐
Material ☐	Use for Testing ☐	Cuffs ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐
Past Expiry Date ☐	Manufacturing Process ☐	
Misidentified ☐	Past Due ☐	OTHER : ☐

Mfg Date: 01/02/18
Job No: 168251

REASON			
REV	DESCRIPTION	DATE	APPROVED



646.3811



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT

**WITHOUT NOTICE
WORK ORDER
NO. 168251**

DAS
30
9-89

NOV 16 2017

NEXT ASSY(S)	PRIORITY DATE INQ-DLVRY	ON 10-08 CHGTS	APICAL INDUSTRIES
J CARDNER	CHECKED		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760)724-5300
SPECIAL APPROVAL			BRACKETS
CONTRACT NO.			
*ALL OTHERS SPEC'D SHOWN IN INCHES COLP. REPAIRS 3 PLACES INSTALLED 1 SOD			QTY CASE CODE DWT LBS 646.3800 SUBV. INFO 3 BRKT 2 CHS

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____																			



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 914460

Date: 22-Jan-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chantal Lavoie
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
10 ea	Part: 647.4115 Shim Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22300		Rev: N/C PO: PO038727 Line: 10
10 ea	Part: 647.7913 Doubler Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22301		Rev: A PO: PO038727 Line: 11
12 ea	Part: 646.3719 Doubler Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22305		Rev: A PO: PO038727 Line: 15
10 ea	Part: 646.3811 Radius Block Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22306		Rev: A PO: PO038727 Line: 16
10 ea	Part: 647.4114 Shim Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing.		Rev: N/C Made in Canada.

Made in Canada.



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO038727

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
			Splice Plate Issue P/O _____ATG, black anodize and prime as per dwg 647.1612 Rev. A							
8	168031	647.3916	Deflector Issue P/O to ATG : Hard Anodize Color Black, Prime as per Dwg 647.3900 Rev. C	Firmed	1/30/17	2 pcs	0 pcs	2 pcs	\$18.80/pcs	\$37.60
9	168033	647.4114	Shim Issue P/O _____ATG, black anodize and prime as per dwg 647.4114 Rev. N/C	Firmed	1/30/17	10 pcs	0 pcs	10 pcs	\$6.95/pcs	\$69.50
10	168034	647.4115	Shim Issue P/O _____ATG, black anodize and prime as per dwg 647.4115 Rev. N/C	Firmed	1/30/17	10 pcs	0 pcs	10 pcs	\$6.95/pcs	\$69.50
11	169394	647.7913	Doubler Issue P/O _____ATG, black anodize and prime as per dwg 647.7913 Rev. A	Firmed	1/30/17	10 pcs	0 pcs	10 pcs	\$8.10/pcs	\$81.00
12	168215	646.2910	Deflector Issue P/O to ATG : Hard Anodize, Color Black / Prime As per Dwg 646.2900 Rev. N/C	Firmed	1/30/17	2 pcs	0 pcs	2 pcs	\$48.70/pcs	\$97.40
13	168247	646.3717	Doubler Issue P/O _____ATG, black anodize and prime as per dwg 646.3717 Rev. A	Firmed	1/30/17	20 pcs	0 pcs	20 pcs	\$6.95/pcs	\$139.00
14	168248	646.3718	Custom Washer Issue P/O _____ATG, black anodize and prime as per dwg 646.3718 Rev. A	Firmed	1/30/17	40 pcs	0 pcs	40 pcs	\$4.65/pcs	\$186.00
15	168249	646.3719	Doubler Issue P/O _____ATG, black anodize and prime as per dwg 646.3719 Rev. A	Firmed	1/30/17	12 pcs	0 pcs	12 pcs	\$6.95/pcs	\$83.40
16	168251	646.3811	Radius Block Issue P/O _____ATG, black anodize and prime as per dwg 646.3811 Rev. A	Firmed	1/30/17	10 pcs	0 pcs	10 pcs	\$7.25/pcs	\$72.50
17	168228	646.3312	Center Plate Issue P/O to ATG :	Firmed	1/30/17	8 pcs	0 pcs	8 pcs	\$12.75/pcs	\$102.00